Effects of Power Line Clearing on Domestic Water Supply Near Thutade Lake in Northern B.C.

Complaint Investigation 980158

FPB/IRC/29

May 2000

103-06340/

The Investigation

Between 1997 and 1998, Royal Oak Mines Inc., Kemess Mines Division (the licensee) constructed a 380-kilometre power line from the Kennedy sub-station at Williston Lake (south of Mackenzie) to the Kemess South mine site, near Thutade Lake in northern British Columbia. The construction involved clearing trees from a right-of-way and building hydro towers.

Prior to the clearing of the right-of-way, the complainant, who lives and works near Thutade Lake, expressed concern to the licensee and the government regarding the impact of the power line on his water supply. The complainant and the licensee discussed moving the water intake for the complainant's water line as a form of compensation and considered a draft contract stipulating the amount of compensation. However, the licensee subsequently withdrew the offer.

On April 11, 1997, the complainant observed that, during the clearing of the right-of-way, heavy construction equipment was crossing through several small streams, including one creek that supplies his drinking water. He videotaped the occurrences and gave a copy to the Ministry of Forests.

Approximately one year later, on July 27, 1998, he submitted a complaint to the Forest Practices Board (the Board). The complainant asserted that the licensee violated machine-free zones on several creeks, including one creek that supplies his drinking water. He stated that the quality of his domestic water was reduced as a result. The complainant further asserted that, despite the violations of the *Forest Practices Code of British Columbia Act* (the Act), the Ministry of Forests district manager failed to require the licensee to move the complainant's water line to mitigate the damage.

The Board addressed the following questions in its investigation:

1. Was there non-compliance with the Forest Practices Code[1]?
2. Did the district manager comply with the requirements of the Code in his response to the asserted contravention?
3. Was enforcement of the Code appropriate?
4. As a remedy, could the district manager require relocation of the complainant's water line?

During the complaint investigation, Board staff identified significant breaches[2] of the Code elsewhere along the power line. Those matters are the subject of a separate investigation and are being reported separately by the Board.

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[1] The Forest Practices Code, or "the code", refers to the *Forest Practices Code of British Columbia Act* and related regulations.

[2] Defined as a breach of the Act or regulations, or a breach of government enforcement duties, that has caused or is beginning to cause significant harm to persons or the environment.

Investigation Findings

Was there non-compliance with the Forest Practices Code?

Section 67 of the Act states that a person who carries out timber harvesting and related forest practices on Crown forest land must do so in accordance with the Act and with any logging plan for the area.

The Ministry of Forests approved a logging plan for the right-of-way on February 24, 1997. The licensee was to construct a trail in the right-of-way to expedite the clearing and subsequent construction of the power line. Streams would have to be crossed during right-of-way construction, so the logging plan indicated where culverts and skid bridges were required. The plan also identified 5-metre wide "machine-free" zones on either side of the streams. Machines were not to be operated in these zones. All trees had to be felled away from the riparian areas[3] and chipping was not permitted in the machine-free zones. Any chips and debris falling into the machine-free zones were to be removed.

The complainant's videotape of April 11, 1997, shows that machines crossed several creeks (which flow into Moosevale Creek) without structures such as bridges or culverts, and indicates that chipping occurred within the machine-free zone. One of the creeks that was crossed supplies the complainant's drinking water. Moosevale Creek is a high value fish stream—one of several important fish spawning and rearing tributaries to the upper Sustut River. There was no measurement of water quality by the licensee or government at that time.

On April 19, 1997, a Ministry of Energy and Mines inspector and a representative of the licensee met with the complainant. Three days later, Ministry of Forests staff met with the complainant. Upon viewing the videotape, they noted that equipment had been driven through at least one stream many times. The next day (April 23, 1997), the licensee wrote to the Ministry of Forests regarding the complainant's concerns. The licensee stated that crossing a stream on packed snow was permitted under the logging plan. In the Board's view, that assertion was incorrect. The logging plan did not permit crossing the streams without structures and made no mention of snow bridges or crossings on snow pack.

Finding #1

The licensee did not comply with section 67 of the Act in the spring of 1997. Machines were driven through several creeks in the Moosevale Creek area without using bridges or culverts as required by the logging plan.

On April 23, 1997, the Ministry of Forests instructed the licensee to stop work on the northern section of the power line, including the Moosevale Creek area. The ministry took this step because of wet spring conditions. The licensee ceased all operations as instructed. In response to the concerns raised by the Ministry of Forests, the licensee's main contractor also instructed the workers to specifically follow the requirements of the logging plans, especially the requirements for stream crossings.

[3] **Riparian areas** occur next to the banks of streams, lakes and wetlands. Riparian areas include both the area and vegetation which influence and are influenced by the stream.

As the clearing was incomplete, the licensee planned to continue to clear the right-of-way the following winter (1997-98). The logging plan had expired, so an amendment extending the plan was required. For the remainder of the project, the licensee asked for approval to use snowfill or "snow bridges" instead of culverts or bridges when crossing streams. The licensee discussed the matter with the Ministry of Environment, Lands and Parks. The ministry replied that use of snow bridges on most S4 streams[4] would be acceptable, provided the Ministry of Forests district manager approved such practices. On November 17, 1997, the licensee asked the Ministry of Forests to amend the logging plan to allow snow bridges as agreed with the Ministry of Environment, Lands and Parks. The Ministry of Forests approved the amended logging plan on November 24, 1997, but it did not permit the use of snow bridges except in one specified alpine area. The Ministry of Forests did not authorise the licensee to use snow bridges.

The complainant videotaped more of the licensee's operations the following winter, on February 19, 1998. The videotape indicates that, once again, machines had driven through creeks without bridges or culverts. The video documents trails covered with debris and mud, and it shows machine tracks in the riparian zones. The logging plan did not authorize the crossings. The licensee did not comply with the logging plan.

Finding #2

The licensee failed to comply with section 67 of the Act during the winter of 1998 in that it crossed several creeks without the required culverts or bridges. The licensee was carrying out forest practices contrary to the Code and the approved logging plan for this area.

The complainant filmed a third videotape on May 25, 1998. That videotape shows soil and logging debris on the decking of a skid bridge located on the S3 stream[5] that supplied water to the complainant. The videotape also shows the bottom of the bridge in contact with the stream and shows wood chips and felled trees on the stream banks.

During the week of May 27, 1998, a Ministry of Energy and Mines reclamation inspector was carrying out routine environmental monitoring of the project. The reclamation inspector met with the complainant and examined the same bridge and stream. The inspector noted that there was soil packed between corduroy logs[6] and that a good portion of this material had washed into the stream.

On June 4, 1998, Ministry of Forests staff visited the site as part of their investigation of the incidents noted by the complainant in 1997. Staff noted[7] that there was logging debris on the bridge over the stream supplying the complainant's drinking water.

The Ministry of Forests' investigation report also stated that three other streams in the area had logging debris in the streams and along the banks. The report included pictures of the streams.

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[4] The Forest Practices Code classifies streams in part on the basis of the average channel width and the presence of fish. S4 streams contain fish and have a channel width less than 1.5 metres. Different management practices are required for each classification.

[5] S3 streams contain fish and have a channel width between 1.5 and 5 metres.

[6] Corduroy logs refer to logs used as a type of ramp leading up to the bridge from the trail.

[7] Investigation Report DMK 98-0122, dated June 26, 1998.

One S4 stream had a slash pile adjacent to and in the stream. The pile was approximately 4-metres long by 4-metres wide and 1-metre deep.
Section 23 of the *Timber Harvesting Practices Regulation*[8] prohibits depositing a volume of slash or debris capable of damaging fish habitat or reducing water quality into a fish stream or any stream that can transport the debris to such an area.

On June 15, 1998, the licensee conducted a chemical analysis on the water from the stream that supplies the complainant's drinking water. The licensee tested the water both upstream and downstream of the bridge. The analysis concluded that the water was drinkable.

In August 1998, the Ministry of the Environment, Lands and Parks surveyed Moosevale Creek (into which the affected streams flow). Moosevale Creek contains several fish species including chinook salmon, steelhead trout and bull trout. The survey stated that Moosevale Creek is a high value fish stream—one of several important fish spawning and rearing tributaries to the upper Sustut River. However, the survey provided no information about possible damage to fish habitat or a reduction in water quality due to the right-of-way clearing.

The complainant maintains that the quality of his water supply was reduced as a result of the clearing of the right-of-way. Board staff visited the site on October 20, 1998, and confirmed that there was some logging debris in the complainant's water supply stream.

The amended logging plan had required removal of all bridge crossings on the right-of-way by March 31, 1998. The licensee indicated that it could not meet this deadline, but would remove the bridges in the upcoming months. On June 3, 1998, the Ministry of Energy and Mines directed the licensee to remove the bridge over the stream supplying the complainant's drinking water by October 31, 1998. The licensee did not remove the bridge, citing wet site conditions as the reason for the delay. The Ministry of Energy and Mines then directed the licensee to remove the bridge by January 2, 1999. In December 1998, the licensee removed the skid bridge over the creek to prevent possible release of sediment into the complainant's water supply.

Finding #3

The licensee deposited slash and debris capable of damaging fish habitat or reducing water quality into several tributaries of Moosevale Creek, a high value fish stream. One of the tributaries supplies drinking water to the complainant. The licensee failed to comply with section 23 of the *Timber Harvesting Practices Regulation* and, thus, with section 67 of the Act.

Did the district manager comply with the requirements of the Code in his response to the asserted contravention?

Under section 117 of the Act, a senior official[9] may assess a penalty when the Act or an operational plan is contravened.

Section 4 of the *Administrative Remedies Regulation* specifies a 3-year time limit for levying a penalty against a person. This time limit begins after the facts on which the penalty is based

[8] Formerly section 15 of the regulation.

[9] Under the Code, "senior official" means a person employed in a senior position in the Ministry of Forests, Ministry of Environment, Lands, and Parks or the Ministry of Energy and Mines.

first comes to the knowledge of the senior official. In this case, April 1997 would be the applicable date upon when the district manager first learned of the issue.
The district manager held a meeting on December 11, 1998, in order to make a decision on whether possible contraventions occurred, and whether administrative penalties should be applied under the Code. The district manager invited the complainant and the licensee to the meeting. The complainant could not attend because of the distance involved. The licensee attended the meeting and discussed possible contraventions. The district manager did not make a final decision at the meeting. Instead, he instructed staff to gather more site information. Ministry staff subsequently inspected the site.

On February 1, 2000, another meeting was held. At this meeting the district manager discussed recommendations made by his staff on possible remediation measures. The district manager made a decision on April 11, 2000, finding that there had been a contravention of the Code. He ordered the licensee to clean the logging debris out of the creeks and to plant the areas with grass seed and willow to prevent soil erosion. He did not levy an administrative penalty against the licensee.

Finding #4

The district manager initially learned of the equipment driving through the creeks in April 1997. The district manager made a decision on April 11, 2000, finding that there had been a contravention of the Code. The Code provides up to three years for a decision-maker to make a decision regarding administrative penalties. The 3-year time period expired on April 11, 2000, so the district manager complied with the Code.

Was enforcement of the Code appropriate?

Construction of the power line was a major project, requiring clearing of the right-of-way. The clearing resulted in removing approximately 300 000 cubic metres of timber. This is roughly equal to 10 000 transport trucks loaded with logs.

Before the project began, the Ministry of Forests and Ministry of Energy and Mines discussed monitoring and enforcement. The Forest Practices Code enables both ministries to conduct enforcement. The ministries agreed that the Ministry of Energy and Mines would conduct regular inspections and notify the Ministry of Forests of any concerns. Upon notification, the most appropriate agency would respond. The licensee stated that it inspected the right-of-way by air every two weeks. Government representatives often flew with the licensee during these inspections.

The Ministry of Forests district office stated that it had limited money and staff with which to monitor or enforce the requirements of the Code for the project. The Ministry of Forests had directed staff to assign high priority to processing cutting permits in order to provide the forest industry with at least two years inventory of standing wood. The district manager stated that this priority reduced the district's ability to conduct enforcement activities on the right-of-way clearing.

In April 1997, the Ministry of Energy and Mines and the Ministry of Forests both sent staff on site because the complainant reported machines crossing creeks without bridges or culverts. Nine months later, on February 17, 1998, the Ministry of Forests sent a letter to the licensee

stating that they were investigating a "possible contravention" of the Code. On June 4, 1998, Ministry of Forests staff visited the site to collect evidence.
On December 11, 1998, the Ministry of Forests district manager considered the asserted contraventions that had been reported on April 11, 1997. However, prior to making a decision he stated he wanted more site information in order to determine if there was any environmental damage and, if so, the need for remediation.

Meanwhile, the licensee encountered financial difficulties that came to a head on February 15, 1999. On that date, an Ontario Court issued an Order applying protection under the Federal *Companies' Creditors Arrangement Act*. The Order, effective Canada-wide, was broad in scope. It suspended enforcement of statutes, possibly including the Code.

On April 16, 1999, a subsequent Order[10] appointed an interim receiver for the licensee. That Order requires the receiver to comply with legislation concerning the environment, subject to extensive exceptions. The effect, if any, of this Order on enforcement of the Code was not clear to the Board.

The Ministry of Forests informed the Board on June 18, 1999, that the February Order still precluded enforcement of the Code. However, the Ministry of Forests had from April 1997, when they first learned of equipment driving through creeks, until February 1999, when the Ontario Court Order came into effect, to make a determination concerning compliance with the Code. Although the district manager is in compliance with the Code, the Board considers, that enforcement of the Code has been inappropriate given the repetitious non-compliance with the Code by the licensee.

Finding #5

The district manager took three years to make a decision that there had been a contravention of the Code. The delay has allowed the non-compliance to reoccur and has left the complainant's water supply problems unresolved during this time. Enforcement of the Code has been inappropriate.

As a remedy could the district manager require relocation of the complainant's water line?

The complainant asked that the district manager require the licensee to move his water line to an area that had not been affected by the licensee's machinery.

Section 118 of the Act states that a senior official (such as a district manager of Forests) can require a licensee to repair any damage caused by a contravention. However, the repair must be *to the land* on which the forest practice was carried out. Once the senior official makes a determination, measures designed to repair damage to the stream, stream banks or forest resource can be ordered under section 118 of the Act. However, movement of the complainant's water line is not a remedy provided by the Code.

[10] This order appointed a receiver and stated that nothing in the order would affect or in any way limit the application of any federal, provincial, or territorial legislation concerning the environment.

On April 11, 1996, a Project Approval Certificate issued under *the Environmental Assessment Act* stated that:

> for the life of the Project the proponent must continue, to the reasonable satisfaction of the minister, to pursue resolution of issues raised by guide outfitters in the Project area during the Project review.

The licensee and the complainant (one of two guide outfitters in the area) had discussed an agreement regarding outstanding issues and had tentatively agreed to compensation in the form of relocating the water line. However, the licensee withdrew that offer because the company manager was not authorized to make that commitment. The complainant has not been contacted by the licensee to discuss compensation since 1997. The financial condition and subsequent change in ownership of the licensee contributed to this situation. The requirement to pursue resolution of outstanding project issues is a condition of the mine's Project Approval Certificate. Regardless of the final owner of the mine, the conditions of the certificate must be met, including resolving issues raised by the guide outfitters.

Finding #6

The complainant wanted his water line to be moved but the district manager cannot enable this under the Code. Section 118 of the Act states that a senior official (such as a district manager of Forests) can require a licensee to repair any damage to the land caused by a contravention. Moving the water line is possible but only under the conditions of the mine's Project Approval Certificate, not the Code.

Related Developments—Significant Breach

During the investigation, it became apparent that the licensee had not completed deactivation or maintenance obligations on the Kemess South power line right-of-way and related access roads. Board staff concluded that failures by the licensee to deactivate or maintain roads, bridges and bladed skid trails had both caused, and were continuing to cause, significant environmental harm along the right-of-way and related access roads. Board staff notified the Code ministers[11], the Board, and the licensee on June 29, 1999, that these were significant breaches of the Code.

In addition to reporting the significant breaches, the Board initiated a special investigation to report publicly about the significant breaches and the subsequent government and licensee response to the reporting of the breaches. That investigation continues and the results will be reported to the government and the public once it is concluded.

[11] The ministers of: Forests; Environment, Lands and Parks; and Energy and Mines.

Conclusions

1. Was there non-compliance with the Forest Practices Code?

   The licensee repeatedly did not comply with the Code when running machines through and leaving logging debris in several creeks in the Moosevale Creek area. The complainant obtains his drinking water from one of these creeks.

2. Did the district manager comply with the requirements of the Code in his response to the asserted contravention?

   The district manager made his determination regarding administrative penalties within the 3-year time limit required by the Code.

3. Was enforcement of the Code appropriate?

   Enforcement of the Code was not appropriate. The district manager's delay in making a determination did not deter the licensee from subsequent repeated non-compliance with the Code.

4. As a remedy, could the district manager require relocation of the complainant's water line?

   Movement of the complainant's water line is not a remedy provided by the Code. However, the mine's Project Approval Certificate requires the licensee to pursue the resolution of issues which concern the complainant. This can include moving the complainant's water line.

Commentary:

Before right-of-way clearing began, the licensee knew of the complainant's concern regarding potential impacts to his domestic water supply. The licensee was specifically directed to deal with the complainant's concerns as a condition of project approval. In addition, the Ministry of Forests required bridges, culverts and machine-free zones along creeks in the logging plan. There was no ambiguity and no basis for confusion. The complainant's water supply should not have been adversely affected.

Nevertheless, machines were driven through creeks because the licensee failed to install bridges and culverts as required. Logging debris was also deposited in creeks. The licensee carried out these activities without regard to the complainant. When the complainant informed the Ministry of Forests of these problems, the licensee, Ministry of Forests and Ministry of Energy and Mines responded almost immediately. The licensee instructed its workers to comply with the logging plans. The Ministry of Forests inspected the area and ordered the licensee to stop its clearing operations for the season because of the wet spring conditions. The Ministry of Forests also began investigating the possible contraventions identified by the complainant. This was a good initial response. However, the ministries did not determine whether or not the complainant's water quality had been impacted. Neither did they act to ensure that the complainant would continue to have clean water.

The complainant first notified the agencies and licensee about machines driving through creeks in 1997. The initial actions of the licensee and regulatory agencies did not remedy the problem. In the spring of 1998, the licensee again failed to properly install culverts or bridges and, again, drove machines through creeks. The complainant protested a second time to the regulatory agencies. The Ministry of Forests did not complete its investigation and determination regarding the 1997 issues, much less the 1998 issues. The actions of the licensee and the Ministry of Forests continued to be inadequate in 1998. Appropriate enforcement action by the Ministry of Forests was long overdue.

RECOMMENDATIONS

In accordance with section 185 of the *Forest Practices Code of British Columbia Act*, the Board makes the following recommendation:

> As required by the mine's Project Approval Certificate, the licensee should complete discussions with the complainant and resolve the issues raised during the environmental assessment project review. The licensee should ensure that the complainant has access to clean water. These meetings should resume immediately.

In accordance with section 186 of the Act, the Board requests that the licensee advise the Board and the Ministry of Energy and Mines by September 1, 2000, about how it has addressed the recommendation.

The panel of the Board that considered the report from the complaint analyst and representations, and concluded this report was John Cuthbert, Liz Osborn and Ingrid Davis.

Location of Thutade Complaint